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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,022	05/05/2004	David B. Naughton	12353-004	9650
757 7590 01/25/2008 BRFNKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			EXAMINER HUSON, MONICA ANNE	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 01/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/840,022	Applicant(s) NAUGHTON, DAVID B.	
	Examiner Monica A. Huson	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the RCE filed 9 November 2007.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-2, and 5-7 rejected under 35 U.S.C. 102(a) as being anticipated by Stevenson et al. (U.S. Patent Application Publication 2003/0141620). Regarding Claim 1, Stevenson et al., hereafter "Stevenson," show that it is known to carry out a method of manufacturing a high surface energy molded article with a mold having an inner surface (Abstract), the method comprising: applying a chlorinated polyolefin to the inner surface of the mold(para 0021); introducing a thermoplastic resin having a temperature of at least 190 degrees Celsius on the chlorinated polyolefin in the mold, the thermoplastic resin having a predetermined heat energy, to transfer at least a portion of the heat energy of the thermoplastic resin to the chlorinated polyolefin (para 0035); defining a molded article having a surface (para 0035); and maintaining contact of the thermoplastic resin and the chlorinated polyolefin for a predetermined time period to diffuse the chlorinated polyolefin through at least a portion of the surface of the molded article to increase the surface energy of the portion of the molded article for enhanced adhesion (para 0035).

Regarding Claim 2, Stevenson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the step of applying the chlorinated polyolefin to the inner surface of the mold includes spraying a plurality of chlorinated polyolefin particles to the inner surface of the mold (para 0027).

Regarding Claim 5, Stevenson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the chlorinated polyolefine is a chlorinated polyolefin solution (para 0024).

Regarding Claim 6, Stevenson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method comprising the step of applying an electrically conductive substance to the inner surface of the mold (para 0017).

Regarding Claim 7, Stevenson shows the process as claimed as discussed in the rejection of Claim 6 above, including a method wherein the electrically conductive substance is copper (para 0017).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 8-13, and 15-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson, in view of Rechenberg et al. (U.S. Patent Application Publication 2004/0249075).

Regarding Claim 3, Stevenson shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show applying an electrical charge to the particles. Rechenberg et al. (US 2004/0249075) further teaches that the coating composition can be applied by an electrostatic spray involving the steps of charging the particles to be sprayed by passing them through a corona field and depositing said particles onto the grounded article (paragraph 0092). Therefore it would have been obvious to one skilled in the art at the time the invention was made to include the method of electrostatic spray taught by Rechenberg et al. (US 2004/0249075) for applying a chlorinated polyolefin coating in the process of Stevenson, because of known advantages that electrostatic spraying provides such as reduced pinholes, hence providing for an improved product.

Regarding Claim 4, Stevenson shows the process as claimed as discussed in the rejection of Claim 3 above, including a method wherein the chlorinated polyolefine is a powder (para 0019), meeting applicant's claim.

Regarding Claim 8, Stevenson shows that it is known to carry out a method of manufacturing a molded article with a mold having an inner surface, the method comprising: providing a substance (para 0021); applying the substance to the inner surface of the mold (para 0021); introducing a thermoplastic resin having a temperature of at least 190 degrees Celsius on the substance in the mold, the thermoplastic resin having a predetermined heat energy, to transfer at least a portion of the heat energy of the thermoplastic resin to the substance; defining a molded article having a surface (para 0035); and maintaining contact of

the thermoplastic resin and the substance for a predetermined time period to diffuse the substance through at least a portion of the surface of the molded article (para 0035).

Stevenson does not show applying an electrical charge to the particles. Rechenberg et al. (US 2004/0249075) further teaches that the coating composition can be applied by an electrostatic spray involving the steps of charging the particles to be sprayed by passing them through a corona field and depositing said particles onto the grounded article (paragraph 0092). Therefore it would have been obvious to one skilled in the art at the time the invention was made to include the method of electrostatic spray taught by Rechenberg et al. (US 2004/0249075) for applying a chlorinated polyolefin coating in the process of Stevenson, because of known advantages that electrostatic spraying provides such as reduced pinholes, hence providing for an improved product.

Regarding Claim 9, Stevenson shows the process as claimed as discussed in the rejection of Claim 8 above, including a method wherein the substance includes a chlorinated polyolefine for increasing the surface energy of the portion of the molded article (para 0021), meeting applicant's claim.

Regarding Claim 10, Stevenson shows the process as claimed as discussed in the rejection of Claim 9 above, including a method wherein the chlorinated polyolefine is a powder (para 0019), meeting applicant's claim.

Regarding Claim 11, Stevenson shows the process as claimed as discussed in the rejection of Claim 9 above, including a method wherein the chlorinated polyolefine is a chlorinated polyolefin solution (para 0024), meeting applicant's claim.

Regarding Claim 12, Stevenson shows the process as claimed as discussed in the rejection of Claim 8 above, including a method comprising the step of applying an electrically conductive substance to the inner surface of the mold (para 0017), meeting applicant's claim.

Regarding Claim 13, Stevenson shows the process as claimed as discussed in the rejection of Claim 12 above, including a method wherein the electrically conductive substance is copper (para 0017), meeting applicant's claim.

Regarding Claim 15, Stevenson shows the process as claimed as discussed in the rejection of Claim 8 above, but he does not show the particular surface energy of the claimed invention. However, since Stevenson and Rechenberg teach the claimed process, then the resulting product would have a surface energy of at least 38 dynes per centimeter after the step of removing the molded article from the mold. Further, because Stevenson teaches improved adhesion of chlorinated polyolefin coatings, it is submitted that Stevenson and Rechenberg suggest the improved surface energy of at least 38 dynes/cm.

Regarding Claim 16, Stevenson shows that it is known to carry out a method for manufacturing a high surface energy molded article with a mold having an inner surface, the method comprising: spraying the plurality of particles of the substance onto the inner surface of the mold (para 0027); and inserting a thermoplastic resin having a temperature of at least 190 degrees Celsius into the mold such that the substance is bonded to an outer surface of the thermoplastic resin (para 0035). Stevenson does not show applying an electrical charge to the particles. Rechenberg et al. (US 2004/0249075) further teaches that the coating composition can be applied by an electrostatic spray involving the steps of charging the particles to be sprayed by passing them through a corona field and depositing said particles onto the grounded article (paragraph 0092). Therefore it would have been obvious to one skilled in the art at the time the invention was made to include the method of electrostatic spray taught by Rechenberg et al. (US 2004/0249075) for applying a chlorinated polyolefin coating in the process of Stevenson, because of known advantages that electrostatic spraying provides such as reduced pinholes, hence providing for an improved product.

Regarding Claim 17, Stevenson shows the process as claimed as discussed in the rejection of Claim 16 above, including a method wherein the mold includes an injection molding apparatus, and the step of inserting a thermoplastic resin into the mold includes injecting molding the thermoplastic resin into the mold (para 0035), meeting applicant's claim.

Regarding Claim 18, Stevenson shows the process as claimed as discussed in the rejection of Claim 17 above, including a method comprising the step of applying an electrically conductive substance to the inner surface of the mold (para 0017), meeting applicant's claim.

Regarding Claim 19, Stevenson shows the process as claimed as discussed in the rejection of Claim 18 above, including a method wherein the electrically conductive substance is copper (para 0017), meeting applicant's claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Monica A Huson

January 22, 2008